

PATENT  
DON01 P-939

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Ralph A. Spooner and Jerry L. Beck,

For : MIRROR MOUNT WITH ACCESSORY HOUSING

United States Patent and Trademark Office

Dear Sir:

PRELIMINARY AMENDMENT

Prior to the examination of this divisional application, Applicants request amendment of the application as follows:

IN THE TITLE:

Please delete "TOGGLE ASSEMBLY FOR REARVIEW MIRROR" and insert therefor -- MIRROR MOUNT WITH ACCESSORY HOUSING --.

IN THE SPECIFICATION:

After the title and before the first line of the specification, please insert:

-- CROSS-REFERENCE TO RELATED APPLICATION

This is a division of copending application Serial No. 09/533,127, filed March 23, 2000, by Ralph A. Spooner and Jerry L. Beck, entitled TOGGLE ASSEMBLY FOR REARVIEW MIRROR, which is hereby incorporated by reference herein. --

Please replace the paragraph beginning at line 32 of page 6 with the following rewritten paragraph:

Interior rearview mirror assembly 10 may comprise additional electronic components, such as a circuit board 11 (FIG. 2), map reading lights, a speaker and/or microphone, which

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may be in the mirror or within a module attached to the mirror or mounting arm as disclosed in commonly assigned, co-pending U.S. Pat. Application, Ser. No. 09/382,720, filed August 25, 1999, now U.S. Pat. No. 6,243,003, an indicator for the microphone of the type disclosed in commonly assigned, co-pending U.S. Pat. Application, Ser. No. 09/396,179, filed September 14, 1999, now U.S. Pat. No. 6,278,377, displays, such as of the types disclosed in commonly assigned, co-pending U.S. Pat. Application, Ser. No. 09/448,700, filed November 24, 1999, communication systems, which may comprise a processing system of the type disclosed in commonly assigned, co-pending U.S. Pat. Application, Ser. No. 09/466,010, filed December 17, 1999 by Jonathan E. DeLine et al. for INTERIOR REARVIEW MIRROR SOUND PROCESSING SYSTEM, and/or the like, all of the disclosures of which are hereby incorporated herein by reference. Additionally, the interior rearview mirror assembly may comprise storage capabilities, such as disclosed in commonly assigned, co-pending U.S. Pat. Application, Ser. No. 09/449,121, filed November 24, 1999, and/or a compartment for electrical accessories, such as disclosed in commonly assigned, co-pending U.S. Pat. Application, Ser. No. 09/433,467, filed November 4, 1999, and/or the like, the disclosures of which are hereby incorporated herein by reference. Clearly, however, the rearview mirror assembly 10 may comprise a conventional, baseline prismatic mirror, without affecting the scope of the present invention.

Please replace the paragraph beginning at line 21 of page 11 with the following rewritten paragraph:

Accessory 34 may be positionable within lens or housing 40 of support element 36. The accessory 34 may be mounted to a circuit board 35 or otherwise secured within housing 40. Such accessories can include, for example, a light source, such as an incandescent light source or a light emitting diode (LED) or any other illumination source which is operable to illuminate a portion of the interior vehicle cabin. The incandescent light source may be a PCB mountable subminiature incandescent light, such as a miniature incandescent lamp for PC boards, commercially available from Harison Electric Co., Ltd. of Ehime, Japan as product number HRQ2-4507R or H25-4811R. Preferably, illumination is achieved using directed low level non-incandescent light sources, such as light emitting diodes (LEDs),

organic light emitting material, electroluminescent sources (both organic and inorganic), and the like. Such non-incandescent sources may be low power and directed low intensity sources, such as described in U.S. Patent No. 5,938,321 and copending application entitled "INTERIOR MIRROR ASSEMBLY FOR A VEHICLE INCORPORATING A SOLID-STATE LIGHT SOURCE", Serial No. 09/287,926, filed April 7, 1999, now U.S. Pat. No. 6,139,172, which are incorporated herein by reference in their entireties. Alternately, the light source may be a neon lamp or fluorescent lamp, such as a cold cathode fluorescent lamp, or may be a halogen lamp, or other gas light source, such as an Argon lamp or the like. Most preferably, the light source is a white light emitting diode for illuminating the vehicle cabin. For example, the light source may comprise an instrumentation/console light for consoles or may be a reading or map light. In such applications, it is preferred that the accessory comprise a plurality of light sources or LEDs, preferably white light emitting diodes, with the light therefrom being directed to illuminate a target area of the vehicle, such as the driver and/or passenger lap area. The light source 34 and/or the circuit board 35 may be angled or otherwise oriented to direct the illumination toward the targeted area. Additionally, lens 40 may direct and focus the light from light sources 34 at the targeted area. The light source or accessory 34 may be activated by a button or switch at the mirror assembly or elsewhere in the vehicle and/or by activation of a remote key fob and/or by opening a door of the vehicle.

Please replace the paragraph beginning at line 13 of page 12 with the following rewritten paragraph:

It is also possible to incorporate low level lighting for vehicles in the mirror mount by fitting a low level non-incandescent light emitting light source, such as a light emitting diode, such as for illuminating an instrument panel or console as disclosed in commonly assigned U.S. Patent No. 5,671,996, the disclosure of which is hereby incorporated by reference. A variety of emitting sources may be used, such as high intensity amber and reddish orange light emitting diode sources, such as solid state light emitting diode LED sources utilizing double hydro junction AlGaAs/GaAs Material Technology, such as very high intensity red LED lamps (5 mm) HLMP-4100/4101 available from Hewlett Packard Corporation of Palo Alto, California, or transparent substrate aluminum indium gallium phosphide (AlInGaP) Material

Technology, commercially available from Hewlett Packard Corporation of Palo Alto, California. Also, blue or white LEDs can be used, or a combination of individual different colored diodes, such as red, blue, white, green, amber, orange etc. can be used with color mixing thereof to form a desired color or to deliver a desired local intensity of illumination. White emitting light-emitting diodes are available from Nichia Chemical Industries of Tokyo, Japan and from Cree Research Inc., of Durham, North Carolina. For example, a white light emitting diode is available from Nichia Chemical Industries of Tokyo, Japan under Model Nos. NSPW 300AS, NSPW 500S, NSPW 310AS, NSPW 315AS, NSPW 510S, NSPW 515S and NSPW WF50S, such as is disclosed in U.S. patent application Serial No. 09/448,700, entitled "Rearview Mirror Assembly With Added Feature Modular Display", filed November 24, 1999 by Timothy G. Skiver et al. of Donnelly Corporation, and in U.S. patent application Serial No. 09/244,726 entitled "Rearview Mirror Assembly Incorporating Vehicle Information Display ", filed February 5, 1999 by Jonathan E. DeLine et al. of Donnelly Corporation, now U.S. Pat. No. 6,172,613, the entire disclosures of which are hereby incorporated by reference herein. A variety of constructions are used including GaAsP on GaP substrate, gallium aluminum phosphide, indium gallium nitride, and GaN on a SiC substrate. Optionally, a plurality of LEDs such as a cluster of two, three, four, six, eight or the like LEDs (each of the same color or the cluster comprising different colored LEDs) can be used to target and illuminate a local area for higher illumination at that area, such as may be useful in a map light or as a reading light or as an interior light or as an illumination source for an interior vehicle cabin-mounted and monitoring camera (most preferably illuminating the target area with white light). Such a cluster of high efficiency LEDs can be mounted at the mirror mount so as to project an intense pattern of light generally downwardly into the vehicle cabin for purposes of map reading, general illumination, courtesy illumination and the like. Also, a cluster of LED's, preferably including at least one white emitting LED and/or at least one blue emitting LED, can be mounted in a roof portion, side portion or any other portion of the vehicle cabin to furnish dome lighting, rail lighting, compartment lighting and the like. Use of white emitting LEDs is disclosed in U.S. patent application Serial No. 09/249,929, now U.S. Pat. No. 6,152,590 (attorney docket 61366) entitled "Lighting Device For Motor Vehicles", filed February 12 1999 by Peter Fuerst and Harald Buchalla of

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Donnelly Hohe GmbH & Co, KG, the entire disclosure of which is hereby incorporated by reference herein.

IN THE ABSTRACT:

Please delete the Abstract on page 22 and replace it with the following new paragraph:

-- A mirror mount assembly is adapted for mounting to an interior surface of a windshield of a vehicle and for pivotally mounting an interior rearview mirror assembly thereto. The mirror mount assembly includes a mounting base for mounting at the interior surface of the windshield, an accessory housing extending generally downwardly from the mounting base, and at least one accessory positionable within the accessory housing. The mounting base includes a ball member for pivotal connection to the mirror assembly. The accessory may be one or more of at least one illumination source, a microphone, an attachment member, a compass sensor, an antenna and an interface button. --

A new Abstract sheet is attached.

IN THE CLAIMS:

Please cancel claims 1-47 as originally filed.

Please insert new claims 55-57 as follows:

55. The mirror mount assembly of Claim 51, wherein said illumination source comprises at least one light emitting diode.

56. The mirror mount assembly of Claim 55, wherein said illumination source comprises a plurality of light emitting diodes.

TOP SECRET - EYES ONLY

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57. The mirror mount assembly of Claim 49, wherein said at least one accessory comprises an attachment member suitable for attaching a map.

REMARKS

Claims 48-57 are pending in the application. Seven (7) sheets of formal drawings are attached for entry in the present application. Entry and approval of the attached formal drawings is respectfully requested.

Applicants have amended the Specification as set forth above to update some of the incorporated applications, which have now issued as U.S. patents.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

An early and favorable action on the merits is respectfully solicited.

Respectfully submitted,

RALPH A. SPOONER AND JERRY L. BECK

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: November 17, 2001

  
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GaP substrate, gallium aluminum phosphide, indium gallium nitride, and GaN on a SiC substrate. Optionally, a plurality of LEDs such as a cluster of two, three, four, six, eight or the like LEDs (each of the same color or the cluster comprising different colored LEDs) can be used to target and illuminate a local area for higher illumination at that area, such as may be useful in a map light or as a reading light or as an interior light or as an illumination source for an interior vehicle cabin-mounted and monitoring camera (most preferably illuminating the target area with white light). Such a cluster of high efficiency LEDs can be mounted at the mirror mount so as to project an intense pattern of light generally downwardly into the vehicle cabin for purposes of map reading, general illumination, courtesy illumination and the like. Also, a cluster of LED's, preferably including at least one white emitting LED and/or at least one blue emitting LED, can be mounted in a roof portion, side portion or any other portion of the vehicle cabin to furnish dome lighting, rail lighting, compartment lighting and the like. Use of white emitting LEDs is disclosed in U.S. patent application Serial No. \_\_\_\_ 09/249,929, now U.S. Pat. No. 6,152,590 (attorney docket 61366) entitled "Lighting Device For Motor Vehicles", filed February 12 1999 by Peter Fuerst and Harald Buchalla of Donnelly Hohe GmbH & Co, KG, the entire disclosure of which is hereby incorporated by reference herein.

MIRROR MOUNT WITH ACCESSORY HOUSING

ABSTRACT OF THE DISCLOSURE

A mirror mount assembly is adapted for mounting to an interior surface of a windshield of a vehicle and for pivotally mounting an interior rearview mirror assembly thereto. The mirror mount assembly includes a mounting base for mounting at the interior surface of the windshield, an accessory housing extending generally downwardly from the mounting base, and at least one accessory positionable within the accessory housing. The mounting base includes a ball member for pivotal connection to the mirror assembly. The accessory may be one or more of at least one illumination source, a microphone, an attachment member, a compass sensor, an antenna and an interface button.